CLAIMS:

1. A code-tracking system, comprising:

a loop filter (22), which receives an early/late error signal and outputs a loop filter error signal;

an error scaling device (26), which receives the loop filter error representing an update and provides a code tracking adjustment signal;

a controller (24) which monitors at least one of a frequency of updates and a number of same direction updates and provides a filter coefficient (K) in accordance with at least one of the frequency of updates and the number of same direction updates.

2. The system as recited in claim 1, wherein the loop filter (22) includes at least two filter coefficients.

3. The system as recited in claim 1, wherein the controller (24) includes at least one counter (33), which counts a number of updates.

4. The system as recited in claim 1, wherein the controller (24) includes memory and the memory stores a plurality of filter coefficients.

5. The system as recited in claim 1, wherein the controller includes memory (35) and the memory stores a user defined threshold for comparison to a number of updates.

6. The system as recited in claim 1, wherein the early/late error signal is computed as a result of amplitude differences between early and late samples of a received signal.

7. The system as recited in claim 1, wherein the controller (24) replaces the filter coefficients (K) with new filter coefficients to enhance code tracking and to resynchronize received signals.

8. A method for code-tracking in spread spectrum systems, comprising

the steps of:

modifying (106) a count after each update of a loop filter output;

comparing (108) the count to a user-defined threshold; and

if the count does not exceed the user-defined threshold and if a code tracking adjustment value is non-zero, changing (112) loop filter coefficients to synchronize received signals.

9. The method as recited in claim 8, wherein the step of changing loop filter coefficients (112) includes replacing the loop filter coefficients with larger filter coefficients to increase gain when an update frequency reaches or exceeds a threshold.

10. The method as recited in claim 8, further comprising the step of storing (35) a plurality of filter coefficients.

11. The method as recited in claim 10, further comprising the step of replacing (24) the filter coefficients with one or more of the plurality of filter coefficients in accordance with loop filter conditions.

12. The method as recited in claim 8, further comprising the step of computing (21) early/late error signals as a result of amplitude differences between early and late samples of a received signal to determine updates.

13. The method as recited in claim 8, wherein the step of changing (112) includes replacing the filter coefficients with new filter coefficients to enhance code tracking and to resynchronize received signals.

14. A method for code-tracking in spread spectrum systems, comprising the steps of:

modifying (206) a count after a number of same direction updates of a loop filter output;

comparing (208) an absolute value of the count to a user-defined threshold; and

if the absolute value exceeds the user-defined threshold, changing (210) loop filter coefficients.

15. The method as recited in claim 14, wherein the step of changing (210) loop filter coefficients includes replacing (24) the loop filter coefficients with new filter coefficients to modify gain when a number of updates in a same direction reaches or exceeds a threshold.

16. The method as recited in claim 14, further comprising the step of storing (35) a plurality of filter coefficients.

17. The method as recited in claim 16, further comprising the step of replacing (24) the filter coefficients with one or more of the plurality of filter coefficients in accordance with loop filter conditions.

18. The method as recited in claim 14, further comprising the step of computing (21) early/late error signals as a result of amplitude differences between early and late samples of a spread spectrum to determine updates.

19. The method as recited in claim 14, wherein the step of changing (210) includes replacing (24) the filter coefficients with new filter coefficients to enhance code tracking and to resynchronize received signals.